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COMMENTS OF TRANSCANADA KEYSTONE PIPELINE, LP  
ON SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT  
PREPARED BY THE UNITED STATES DEPARTMENT OF STATE  
FOR THE KEYSTONE XL PIPELINE PROJECT

TransCanada Keystone Pipeline, LP (Keystone) hereby submits its comments on the Supplemental Draft Environmental Impact Statement (SDEIS) prepared by the United States Department of State (DOS) for the Keystone XL Pipeline Project (Keystone XL Project or the Project).

### Introduction

Keystone submits that the SDEIS, in conjunction with the Draft Environmental Impact Statement (DEIS) issued by DOS in April 2010, represents the product of an exhaustive and comprehensive, two and one-half year analysis of the environmental impacts of the proposed Keystone XL Project. There can be no question that the SDEIS, in conjunction with the 2010 DEIS, comprise a fully adequate review of the Project in full satisfaction of National Environmental Policy Act (NEPA) standards. Indeed, the review of the Keystone XL Project will substantially exceed the reviews of the previous Presidential Permit applications for pipeline projects delivering western Canadian crude oil to the United States.

Keystone concurs with the DOS' adequacy assessment of the DEIS and the agency's conclusion that it was not mandatory to issue a SDEIS in this case (Notice of Availability, 76 Fed. Reg. 22745, April 22, 2011). The DEIS was developed in compliance with the scoping process required under NEPA and in compliance with the governing Council on Environmental Quality (CEQ) regulations and provided sufficient information on key environmental issues to allow a full understanding of the potential

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Moreover, subsequent to issuance of the DEIS, the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) developed 57 stringent Special Conditions regarding pipeline construction, operation, and maintenance that Keystone voluntarily agreed to adopt for the Project. These 57 Special Conditions go above and beyond the otherwise applicable pipeline safety and integrity requirements for a crude oil pipeline. As a result of Keystone's agreement to adopt these conditions, the SDEIS concluded that:

[i]ncorporation of those conditions would result in a Project that would have a degree of safety over any other typically constructed domestic oil pipeline system under current code and a degree of safety along the entire length of the pipeline system similar to that which is required in High Consequence Areas (HCAs) as defined in 49 CFR 195.450. (SDEIS at p. 2-9).

Taking into account all of this additional study and information developed subsequent to the DEIS, the SDEIS finds that no new issues of substance emerged from the comments and there were no significant new circumstances or information concerning the proposed project or its potential impacts that were not already considered in the DEIS. The SDEIS concludes that *"the information provided in this SDEIS does not alter the conclusions reached in the draft EIS regarding the need for and the potential impacts of the proposed Project."* (SDEIS at p. ES-5, emphasis added).

Given the adequacy of the DEIS and the SDEIS, and the confirmation of the DEIS findings in the SDEIS, Keystone will restrict its comments on the SDEIS to necessary corrections, clarifications, and limited supplemental, confirming, or contextual information on certain issues. Keystone does not believe that any of the information provided in its comments warrants or requires further opportunity for public comment. In

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any event, if DOS were to determine that a further opportunity for comment was required, it could receive comments on the Final EIS and address them, to the extent deemed necessary, in the Record of Decision. See 40 CFR §1503.1(b).

**A. Corrections and Clarifications**

Keystone has reviewed the SDEIS and appreciates the substantial effort that is reflected in the document. In its review, Keystone identified a number of statements that require correction or clarification in the FEIS. Keystone has prepared and attached hereto a table (Table 1) that identifies these corrections or clarifications by reference to the SDEIS section, page and line numbers.

**B Comments on Environmental Justice**

The SDEIS contains an extensive analysis of Environmental Justice (EJ) issues. (SDEIS Section 3.10.1.1). As noted in Table 1, to a certain extent, the EJ analysis appears to be designed to find an impact. In no way did Keystone route its pipeline with the intent to disproportionately "impact" low income or minority populations. That would be contrary to Keystone and TransCanada's operating philosophy. Rather, the routing was intended to minimize all impacts.

To place some important context around this issue, Keystone will describe the specific efforts that it makes to reach out and take into consideration the concerns of minority and low-income populations. As set forth herein, Keystone takes affirmative steps to ensure that it recognizes the importance of the "fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income" in the development and implementation of the proposed Project.

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**1. *Hispanic Community Outreach***

Keystone's work with Hispanic communities and organizations in the United States illustrates Keystone's commitment and approach to keeping minority and other special interest communities informed about the proposed Project and seeking the input of these communities into the Project. These commitments will continue throughout construction and operation, in the event Keystone XL is granted a Presidential Permit.

In September, 2010, Keystone retained the services of a former Chairman and President of the U.S. Hispanic Chamber of Commerce, J.R. Gonzales, to advise Keystone on Hispanic issues and help develop Hispanic community relationships.

During the fall of 2010, in order to provide information to interested Hispanic groups and citizens, Keystone engaged the services of Dr. M. Ray Perryman and The Perryman Group, an independent economic consulting firm, to study and report the potential economic impact of the proposed Keystone XL Pipeline project on the Hispanic community. Dr. Perryman's study concluded that Hispanic workers are likely to hold nearly 23,000 Full Time Equivalent jobs that are likely to be stimulated by expenditures to develop and construct the Project. The Perryman Group also reported that the stability Keystone XL will bring to U.S. oil markets will stimulate creation of new permanent jobs, and conservatively estimated that Hispanics will likely hold some 37,000 of them. This calculation was done assuming oil prices remain at the comparatively low levels averaged in 2007, with considerably more jobs being developed if oil prices return to higher levels.

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In November 2010, Keystone sent a delegation of operations and communications representatives to a conference of the National Hispanic Professionals Organization (NHPO) to meet with community leadership, discuss the proposed Project's employment opportunities, and seek their advice on supplier diversity programs for contracting opportunities.

While there, Keystone met with several Hispanic leaders whose counsel has helped to guide our approach to employee supplier diversity for the Project. These included: (i) Tina Cordova, owner of Queston Construction and a former Chairman of the Board of the U.S. Hispanic Chamber of Commerce (USHCC); (ii) David Cortinas, a business owner who serves on the Board of Directors of the National Association of Hispanic Publications (NAHP); and (iii) Ben Mendez, president of PMG Project Management and founder of NHPO.

In a similar fashion, Keystone also reached out to current and past leadership of American GI Forum (AGIF), the only federally chartered Hispanic-based veterans organization. AGIF is, in turn, assisting in communicating job and contracting opportunities to U.S. military veterans and in establishing relationships with a broader span of Hispanic and other veterans organizations.

Keystone is likewise working with Hispanic Chambers of Commerce, beginning with local Chambers in states along the Keystone XL Pipeline route. Those Chambers (for example, Fort Worth and Houston) have worked with Keystone in meeting with and establishing a relationship with the U.S. Hispanic Chamber of Commerce (USHCC). Keystone has reviewed the USHCC *Supplier Diversity Best Practices* document in

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shaping the Project's supplier diversity programs, both now and in the event of Permit approval.

Keystone has also met with the leadership of groups including, among others, Latino Unidos, the Latino Coalition, chapters of the National Association of Latino Elected Officials (NALEO), the National Association of Minority Contractors (NAMC), the Hispanic Contractors Association, the Latino Business Association, the Hispanic Alliance for Prosperity Institute, LULAC, the New York State Coalition of Hispanic Chambers of Commerce, the Quad Cities Hispanic Chamber of Commerce (Illinois), Latino Chamber of Commerce of Pueblo, San Antonio Hispanic Chamber of Commerce, Camara de Empresarios Latinos de Houston (whose members are primarily Spanish speakers) and the Hispanic business alliance at the Tyler Area Chamber of Commerce, which is near the proposed pipeline route in Texas. Keystone continues to expand this network of contacts in the Hispanic community.

This networking among Hispanic trade, advocacy and interest groups serves multiple purposes, which include:

- Educating them on the proposed Keystone XL Project and its potential relevance to their members;
- Establishing communications so that, in the event of permit approval, Keystone and its prime contractors can quickly and efficiently communicate available job and contract bid opportunities through a variety of channels;
- Establishing a knowledgeable resource network through which Keystone can gain feedback on its programs in order to improve them going forward.

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Many of the groups with which Keystone has met have found the proposed Keystone XL Project of value to their communities and several of them passed resolutions of support and/or written letters expressing their support.

As part of its commitment to inform Hispanic interest groups and citizens about the proposed Project, Keystone has published and circulated its project brochure and other materials in Spanish, as well as English. In addition, Keystone is taking steps to publish information in the media through its relationships with the National Association of Hispanic Publications and other primarily Hispanic media, including both Spanish- and English-language. These steps to keep affected and interested Hispanic citizens and organizations informed will continue throughout construction and operation, in the event the Presidential Permit is granted.

#### **Application of These Policies in Employment and Supplier Diversity.**

TransCanada and the Keystone have strong commitments to employee and supplier diversity which are expressed in its policies and practices.

**Personnel.** Regarding individuals working directly for Keystone, TransCanada's policy specifically applies to all personnel, including employees, contract workers, contractors and consultants of Keystone and its subsidiaries. TransCanada has in place continuing Affirmative Action plans for females, minorities, individuals with disabilities and covered veterans. These are important tools in meeting Keystone's equal opportunity and affirmative action responsibilities. Keystone, likewise, insists that its prime contractors have similar policies in place and requires them to report to confirm their compliance.

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**Prime and Sub-Contractors.** Regarding the opportunities for companies to perform contract work on the Keystone XL Project, TransCanada staunchly supports a policy of equal opportunity for Minority and Women-Owned Business Enterprises (M/WBEs) and historically Underutilized Businesses (HUBs) in the marketplace.

Keystone is committed to:

- Working to ensure that all have equal opportunity to provide cost-competitive proposals on work associated with our projects;
- Providing all qualified companies equal consideration for business opportunities;
- Communicating this commitment inside Keystone and to our prime contractors and major strategic partners who may subcontract work on our projects; and
- Proactively taking steps to communicate contract opportunities to the M/WBE and HUB communities.

Keystone is also committed to tasking its prime contractors and other strategic business partners to follow similar policies and practices. To this end, TransCanada and Keystone XL management:

- Requests written confirmation that prime contractors and strategic business partners who subcontract out our work share these commitments;
- Request that these partners provide TransCanada with a copy of their own supplier diversity policies; and
- Require that they report to Keystone, on a regular basis, a summary of their outreach to these diverse small business communities, as well as the outcomes of those efforts.

## **2. Tribal Outreach**

Keystone's tribal outreach efforts are important with respect to both its involvement in facilitating the DOS' NHPA Section 106 compliance, as well as to Environmental Justice considerations. The approach to tribal outreach on the Keystone XL Project was developed from TransCanada's over 30 years of experience in working

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with indigenous communities throughout North America. The approach applied the practice of building and maintaining positive relationships with the tribes, who reside near our pipeline rights-of-way, as part of an overall tribal engagement initiative.

Keystone adopted a set of Tribal engagement principles for this Project:

- Keystone respects the diversity of Native American cultures, recognizes the importance of the land and cultivates relationships based on trust and respect;
- Keystone works together with native communities to identify impacts of company activities on the community's values and needs in order to find mutually acceptable solutions and benefits;
- Keystone strives to create short and long-term employment and business opportunities for Native American people impacted by our activities;
- Keystone supports learning opportunities for Native American people to provide a well-trained source of native employees and to build capacity within Tribal communities;
- Keystone respects the legal and Constitutional sovereign rights of Native American peoples and recognizes that relationships with Native American peoples are separate and different from that of the Federal Government;
- Keystone supports the Section 106 government-to-government process and assists the regulatory agencies in achieving goals set forth in Section 106.

Keystone initiated a comprehensive strategy that provided an aggressive and innovative outreach approach. Keystone has continually maintained contact with all interested tribes and has been actively working with tribes in exploring employment and business opportunities for both the construction and operations phases of the project.

In early 2008, Keystone personnel make a series of community visits to introduce the company and its intentions for the proposed Project. Keystone developed a better understanding of the tribes and also exchanged contact information. In late 2008, Keystone hosted three meetings in Pierre, South Dakota, with approximately 17 tribes

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attending to introduce Keystone and its tribal engagement approach. Keystone also planned tribal involvement in the cultural survey process. To date, 25 tribal members, representing 12 tribes, have participated in cultural surveys.

In January 2009, Keystone established a position of Tribal Liaison in its Omaha, NE, office, in order to sustain the development of long term relationships with tribes. The Tribal Liaison has worked actively with the dozens of tribes located in proximity to the Keystone XL Project on various initiatives of mutual interest, such as facilitating enhanced awareness of the pipeline business via "Pipeline 101" sessions, facilitating employment and business opportunities and community investment, as well as involving the tribes in Keystone's Integrated Public Awareness Program. The Tribal Liaison continues to maintain regular contact with the tribes and will do so over the construction and operation of the Project.

Establishing and Maintaining Communications - Keystone established improved communication channels with Tribal officials and other organizations to increase knowledge and understanding of the Keystone XL Project. Keystone, in turn, learned from Tribal governments and organizations of the needs and concerns of their members.

Establishing and Maintaining Ongoing Outreach Mechanisms - As Keystone enhanced its communication channels with the Tribes, outreach occurred promptly and effectively. Keystone shared information with the Tribes and sought their input into the project. Any proposed project changes were communicated to the Tribes as early in the process as was practicable and appropriate. Inherent in the ongoing outreach process was the need for providing technical assistance to Tribes in order for them to realize the full

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potential of the project. By doing this the Tribes recognized the impacts and came to understand that Keystone will make every effort to minimize those impacts. In addition, Keystone strove to resolve problems and issues in a focused manner which is, as always, mindful of the Government-to-Government relationship as well as legal, fiscal and political constraints.

Tribal Meetings – On many occasions, Keystone hosted meetings with the Tribes, which provided a means to share information about the project, potential opportunities for the Tribes to voice their views. These gatherings were separate from Section 106 consultation meetings and provided a forum for airing more general concerns, a means for recharging the relationship, and an opportunity to meet new company personnel. The meetings also allowed Keystone to develop an understanding of the tribe's decision-making process and to get to know its decision makers. The meeting agendas were set by consulting with tribal representatives, so that they may learn what the Tribes expect the process and substance to be. Tribes have their own ways of conducting meetings and Keystone gave plenty of notice beforehand so tribal representatives had adequate time to prepare. The Tribes were also allowed to send as many representatives as they wished.

Community Investment - The main purpose of the community investment efforts was to support local tribal communities aligned with Keystone XL business priorities. Keystone created awareness internally by connecting with Regional Community Outreach Specialists and leveraging Tribal community partnerships and communication initiatives throughout the US. The following are some examples of community investment efforts.

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TRIBE	PROJECT
Cheyenne River Sioux	Emergency Shelter/FEMA
Blackfeet	Para-Professional Training
Ponca	Playground
Rosebud Sioux	Union Dues
Ft Peck	Warrior Society
Gila River	Warrior Society
Warshield Development	Tribal Governance Program
Omaha Tribe	THPO Office Support

Cultural Resources - Keystone contacted both the tribal governmental leaders and the Traditional Historic Preservation Officer prior to the formal initiation of Section 106 consultation in order to determine the appropriate point(s) of contact. Consistent with the Programmatic Agreement and its associated coordination and treatment plans, Keystone XL completed the cultural resources surveys, with the assistance of numerous tribes, so that appropriate avoidance, minimization, and treatment measures were implemented and completed prior to construction. Keystone ensured that the process provided the Tribes a reasonable opportunity to identify its concerns about historic properties; advise on the identification and evaluation of historic properties, including those of traditional religious and cultural importance to them; articulate its views on the undertaking's effects on such properties; and participate in the resolution of adverse effects. Tribal outreach commenced early in the planning process, in order to identify and discuss relevant preservation issues and plans how to address concerns about confidentiality of information obtained during the cultural studies. Keystone made a reasonable and good-faith effort to identify Tribes that may attach religious and cultural significance to historic properties that may be affected by the undertaking, even if those tribes are located a great distance away from the project.

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Traditional Cultural Properties - The effort to identify and evaluate historic properties has also been aided by the completion of Traditional Cultural Property (TCP) reports which Keystone coordinated. The early planning for Keystone XL identified interested tribes and Keystone worked closely with those tribes to complete the studies. The following chart identifies the tribes involved with the studies;

TRIBE	STATE
Alabama-Coushatta	Texas
Northern Arapaho	Wyoming
Blackfeet	Montana
Cheyenne Arapaho	Oklahoma
Spirit Lake Nation	North Dakota
Turtle Mountain Chippewa	North Dakota
Pawnee Nation	Oklahoma
Yankton Sioux Tribe	South Dakota
Santee Sioux	Nebraska
Caddo Nation	Oklahoma
Lower Sioux Tribe	Minnesota

Integrated Public Awareness Program - Tribal public officials associated with the IPA Program were identified and updated in the Keystone IPA database. The focus was on the fact that the IPA efforts needed to be effective and all the authorities responsible for emergency response are known and appropriately involved. As part of the IPA Program an Emergency Scenario on the Ft. Peck Reservation with Keystone personnel, the local municipalities and Tribal Emergency entities to establish protocol for Keystone's Emergency Management process was completed.

Keystone's proactive approach to tribal outreach is based on three key elements: communication, engagement and commitment. Keystone believes that it is important to continually communicate with tribal communities, effectively engage with them about the project activities, and follow through on all commitments.

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**3. *Landowner Outreach, Public Awareness and Emergency Response Programs.***

In addition to its specific Hispanic and Tribal outreach efforts, Keystone considers the needs of minority and low-income populations in developing its landowner communications, pipeline safety, and emergency response programs. For example, the Keystone U.S. Landowner Operations Hotline is staffed with bilingual personnel (English and Spanish). In addition, Keystone's Integrated Public Awareness (IAP) program will utilize bilingual English/Spanish print materials. Moreover, Keystone's design package calls for bilingual warning signage in appropriate locations.

Moreover, in working with local first responders to develop its emergency response procedures, Keystone will take into account the needs of poor and minority populations, specifically with regard to access to medical treatment. Further, Keystone will make efforts to reach out to Local Emergency Planning Committees (LEPC) during and after the development of its Emergency Response Plan (ERP) and public awareness materials. Where appropriate, Keystone validates or vets the material in its public awareness materials and/or ERP with LEPCs and other local or community emergency response agencies. Keystone has mechanisms in place to educate LEPCs and vet its procedures by including LEPCs in training sessions and exercises.

**4. *Labor Relations and Training***

In addition to the considerations raised above, Keystone has entered into a Project Labor Agreement (PLA) for a significant portion of U.S. construction of the proposed Project. The agreement will provide TransCanada with a capable, well-trained and ready workforce in the U.S. to construct Keystone XL. During construction, the project is

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expected to create over seven million hours of labor and over 13,000 new jobs for American workers. The Project Labor Agreement is with the Laborers International Union of North America, the International Brotherhood of Teamsters, the United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada, AFL-CIO, the International Union of Operating Engineers and the Pipeline Contractors Association. By supporting the major crafts, Keystone is assisting in funding their extensive training efforts.

### **C. Comments on Greenhouse Gas Emissions**

The SDEIS analyzes greenhouse gases and climate change as cumulative impacts of the proposed project. With respect to emissions during the construction and operation of the Project, the SDEIS finds that the contribution to cumulative GHG impacts from the Project "is very small compared to total GHG emissions for the United States . . . and global CO<sub>2</sub> emissions." (SDEIS at 3-187). Construction-related emissions from equipment would be short-term, minor, and localized. There would be no direct emissions from the project during operations except infrequent operation of vehicles for inspection and maintenance activities.

The SDEIS also provides information regarding GHG life-cycle emissions associated with oil sands development "as a matter of policy," notwithstanding the finding that the Project would not substantively impact the rate or magnitude of oil extraction activities in Canada or the overall volume of crude oil transported to the U.S. or refined in the U.S. (SDEIS at 3-188).

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The EnSys report commissioned by the Department of Energy made certain significant findings relevant to the GHG emissions impacts of the Project. First, EnSys found that near- and long-term deliveries of Western Canadian Sedimentary Basin (WCSB) crudes to the U.S. Gulf Coast would fill the gap being created by declining supply from traditional heavy crude suppliers, notably Mexico and Venezuela. (EnSys at pp 5-6). Moreover, the EnSys report found that the future level of U.S. refining activity is projected as relatively insensitive to the combination of pipelines available to carry crude out of the Edmonton/Hardisty area. (Id. at p. 6). Most significantly, the EnSys report found that “[t]he WORLD and DOE Energy Technologies Perspective(ETP) model analyses results show no significant change in total U.S. refining activity, total crude and product import volumes and costs, in global refinery CO<sub>2</sub> and total life-cycle GHG emissions whether KXL is built or not. (Id. at 7, citation omitted, emphasis added).

As the EnSys report concluded:

World and ETP studies indicate that building versus not building Keystone XL would not of itself have any significant impact on: total crude oil runs, total crude and product import levels or costs, global refinery CO<sub>2</sub> or life-cycle GHG emissions. This is because changing WCSB crude export routes would not alter either U.S., Canadian or total global crude supply . . . or U.S. and global product demand and quality. The same slate of crude oils would have to be refined even if reallocated geographically. (EnSys at p.116).

The SDEIS also includes a report prepared for DOS by ICF International which examined differences between the life-cycle GHG emissions associated with WCSB oil sands-derived crude oil compared with reference crudes refined in the U.S. The ICF report consists of a review of existing life-cycle studies and models that estimated GHG implications for WCSB oil sands-derived and reference crudes.

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The ICF report concurs with the EnSys report that, "from a global perspective, the project is not likely to result in incremental GHG emissions." (ICF at pp. 38, 47).

However, the ICF Report, as reflected in the SDEIS, found that, on a well-to-wheels basis, GHG emissions estimates from gasoline produced from WCSB oil sands-derived crude oils are 17 percent higher than the GHG emissions estimates for gasoline produced from the average mix of crude oils consumed in the U.S. in 2005, and are higher than the GHG emission estimates for certain Middle Eastern, Mexican, and Venezuelan crudes. (SDEIS at 3-195).

This latter finding misrepresents the actual increase in GHG intensity that could even arguably be associated with the Keystone XL Project. As is demonstrated in the Special Report being submitted as comments on the SDEIS by IHS CERA, the average life-cycle GHG emissions for the average oil sands product actually imported into the U.S. is about six percent higher than those of the average crude oil consumed in the U.S. (Special Report, *The Role of the Canadian Oil Sands in the U.S. Market, Energy Security, Changing Supply Trends, and the Keystone XL Pipeline*, IHS CERA (IHS CERA 2011)). This figure is based on the actual composition of oil sands exports to the U.S. rather than an overall range for oil sands produced in Canada. See IHS CERA Special Report, *Canadian Oil Sands: Greenhouse Gas Emissions Compared to Other Sources of U.S. Oil Supply*, Sept. 2010. This makes the oil sands crudes imported into the U.S. comparable to a number of other crudes imported into or produced in the U.S, including some domestic production from California and some imports from the Middle East, Nigeria, and Venezuela. (IHS CERA 2011 at 10).

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As the 2011 IHS CERA report explains, in 2009, oil sands products processed in the United States were 45 percent synthetic crude oil (SCO) and 55 percent bitumen blends. The majority of SCO imports come from mining operations with well-to-wheels GHG emissions that are six percent higher than the average crude consumed in the U.S. The most common bitumen blend is dilbit. Dilbit has lower life-cycle emissions than bitumen because only 70 percent of the dilbit barrel is derived from the oil sands (the remainder consisting of less-carbon intensive liquids such as natural gas condensates). A key factor behind the six percent figure is that much of the oil sands product that is transported to the United States contains a blend of bitumen and condensates, which are light liquids and less carbon intensive to produce. IHS CERA notes further that, looking forward, the GHG intensity of U.S. oil sands imports is expected to stay relatively constant around six percent higher than the average crude consumed in the U.S. (IHS CERA 2011 at 10-11).

IHS CERA further addresses the discrepancy between the 17 percent increase in GHG emissions referenced in the SDEIS and the six percent increase referenced above. First, IHS CERA notes that DOE National Energy Technology Laboratory (DOE NETL) data used in the SDEIS assumes the GHG intensity of oil sands extraction and upgrading are 1.5 times higher than IHS CERA's assumptions. The DOE NETL data is 2005 data, which is not reflective of the typical operation or current GHG emission values. Thus, the NETL oil sands values do not represent the current GHG intensity of oil sands and do not appropriately characterize the GHG intensity of oil sands supply. (IHS CERA 2011 at 11 and Appendix at 17-18). Second, the basis of comparison is different – IHS CERA considers the full barrel of products produced from each barrel of oil, while the DOE

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NETL data considers the emissions for only one product - gasoline. As the IHS CERA 2011 report notes, each barrel of crude oil is converted into many products. When comparing GHG emissions from different sources of crude oil, it is relevant to analyze the emissions resulting from all of the products produced, not just one. Further, including emissions from all products removes a potential source of error in allocating emissions across various refined products. (IHS CERA 2011 at 11 and Appendix at 18).

The IHS CERA comments further conclude that construction of the Keystone XL Project would result in incremental GHG emissions that are well below that assumed in the SDEIS base case, for two reasons. First, the SDEIS assumes that all oil sands supply is substituted for relatively light Middle East crude. This appears unlikely, particularly in view of the EnSys finding that WCSB heavy will substitute for Mexican and Venezuelan heavy crude. The IHS CERA report disputes this assumption, in view of the economic incentives for U.S. Gulf Coast refiners to process higher-profit heavy crude supplies, combined with a longer term outlook for growing heavy crude supplies. In the absence of oil sands crude, Gulf Coast refiners are expected to demand similar volumes of heavy crude oils. (IHS CERA 2011 at 8). Second, the high end of the SDEIS GHG emissions range reflects the results of the DOE NETL study, which does not reflect current operations and overestimates the GHG emissions for oil sands crudes.

#### **D. Comments on Migratory Birds**

The SDEIS observes that bird resources are shared on a continental scale and that partnership-based bird conservation initiatives have produced national and international conservation plans for birds. *In this regard, from a private sector standpoint, it should be noted that TransCanada has been an avid supporter of Ducks Unlimited Canada for over a*

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decade. Partnerships have included support for the Oak Hammock Marsh Interpretative Centre, educational laboratories and the Watershed Legacy program all located in Winnipeg, Manitoba.

TransCanada contributed \$1 million dollars to Ducks Unlimited as part of a 5-year commitment running from 2009-2013 to launch the Ducks Unlimited / TransCanada Partnership regarding Habitat Conservation in the Missouri Coteau and Grand Bayou, Louisiana. This is the first time that Ducks Unlimited Canada will help fund Ducks Unlimited projects in the U.S. and the first time that a corporation has supported both ends of a flyway. The partnership is an example of how industry and environmental organizations can work together effectively and across the border.

Four million dollars was generated by TransCanada's investment of \$1 million, leveraged with funds from the United States Fish & Wildlife Service, Louisiana State Department and the Government of Canada's Natural Areas Conservation Program. Of that, \$2.7 million will be invested in the Missouri Coteau conservation in Saskatchewan and \$1.3 million will be invested in the Grand Bayou Hydrology Restoration project in Louisiana

Saskatchewan is known as the 'duck factory' of North America because it has the most acres of high-density duck habitat in Canada. There can be over 70 breeding pairs of ducks per square mile. The Missouri Coteau is a 25,000 square mile tract stretching across south-central Saskatchewan and is internationally recognized as a critical wildlife habitat area. The region is mainly native grassland and pothole wetlands capable of

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supporting vast populations of breeding waterfowl and providing prime habitat for other wildlife. The Missouri Coteau is particularly important for northern pintails.

This project will focus on three aspects:

- Retain existing uplands and wetland habitat through conservation easements and land purchases
- Restore lost habitats through forage conversion programs.
- Deliver rangeland stewardship programs by working with landowners to improve ecological function and reduce the risk of native habitat loss.

The Grand Bayou project is located on the Pointe-aux-Chenes Wildlife Management area in Louisiana. It includes two management units totalling 4,568 acres of coastal marsh habitat. The area is managed for furbearers, waterfowl, alligators and other wildlife as well as being open to the public for recreational purposes. The area has seen significant habitat deterioration due to various factors such as damaged levees from Hurricane Rita, increased salinity levels and excessive tidal fluctuations. This project will manage salinity and water levels and encourage production of desirable vegetation. Coastal marsh restoration will involve the installation of levees and installation of new water control structures.

This project will focus on:

- Restoration of ~4,575 acres of coastal marsh.
- Construction of one 24,000 linear feet of earthen levee & one 25,000 linear feet of earthen levee.
- Installation of three new water control structures.
- Backfilling portions of an abandoned oilfield access canal.

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**E. Comments on Alternative Routes****1. *Keystone Corridor Alternative***

The SDEIS addresses certain alternative routes that were developed and assessed subsequent to the DEIS. Among the major route alternatives considered was the Keystone Corridor Alternative, which would have paralleled the entire existing Keystone Pipeline. (SDEIS Section 4.3.3.4). Comments suggested that this alternative be used to reduce the distance of pipeline overlying the Sand Hills topographic region of Nebraska and the Northern High Plains Aquifer (NHPAQ) system, which contains the Ogallala aquifer. This potential alternative was eliminated from consideration in the SDEIS. Among many reasons, the SDEIS found that the Keystone Corridor Alternative is 251 miles longer than the proposed Project route and would affect an area at least 3,400 acres larger than the area affected by the proposed Project. As a result, this Alternative would impact more landowners, more wetlands, more agricultural land, more forested land, and more developed land. In addition, the alternative would not eliminate risk to the aquifer but would simply transfer any risk to other parts of the aquifer system that are more heavily used and that also include areas of shallow ground water. The alternative also crosses a greater number of streams and rivers. The screening analysis in the SDEIS indicated that the Keystone Corridor Alternative did not offer an advantage regarding the relative potential impacts to the NHPAQ system nor did it offer an environmental advantage over the proposed Project route. Thus, it was eliminated from further consideration.

In addition to the factors supporting elimination of the Keystone Corridor Alternative from consideration in the SDEIS, Keystone conducted an analysis of the

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incremental cost that would be incurred if the alternative were adopted. As shown on the spreadsheet attached hereto, Keystone's analysis indicates that the pipeline would have cost an additional \$1.6 billion if the Keystone Corridor Alternative had been selected in the initial routing stage. Moreover, it would cost approximately \$2.0 billion more if Keystone were required to adopt the alternative at this point. Of course, adoption of such a route alternative at this point in time would require a substantial re-design of the Project, as well as the commencement of lengthy regulatory proceedings in both North and South Dakota. As such, it would be completely infeasible.

## **2. *I-90 Corridor Alternatives***

The SDEIS also considered what were identified as the I-90 Corridor Alternatives A and B. These alternatives were also developed to reduce the length of the pipeline over the Sand Hills topographic region of Nebraska and the NHPAQ system. After an exhaustive analysis, the I-90 Corridor Alternatives were eliminated from further consideration at the screening level for a wide array of reasons.

In addition to the factors considered in the SDEIS, Keystone conducted an analysis of the incremental cost that would be incurred if the I-90 Alternatives were adopted. As reflected on the attached spread sheet, the pipeline would cost about one half billion dollars more if it followed the I-90 Alternatives.

Beyond the factors considered in the SDEIS, and the incremental cost impact, Keystone would note that I-90 Alternative A requires crossing a steep bluff on the east side of Lake Francis Case, a reservoir along the Missouri River. Crossing at this location could implicate slack flow conditions on the pipeline. In routing the pipeline, Keystone

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typically tries to avoid extreme elevation changes so as to not induce a natural slack flow condition.

Slack flow is defined as a condition where the pressure of the crude oil inside the pipeline is reduced such that the pipeline pressure is less than the vapor pressure of the crude oil itself. The Keystone XL pipeline, under design operating conditions, will not operate in slack flow. Keystone has ensured the operating regime allows for adequate pressure on the crude oil such that a slack flow condition will not arise. The pipeline's controls philosophy (inclusive of valve controls) accomplishes this by regulation of the suction and discharge pressures at the pump stations so they do not drop below the vapor pressure of the crude oil. Further, the pressure in the pipeline is continuously monitored by the Operations Control Center where pressure readings from transmitters placed no more than 20 miles apart along the pipeline are reported back through the SCADA system.

Keystone has avoided extreme elevation changes along the pipeline route, so that natural causes for slack flow are eliminated. It would require a significant effort and substantial incremental expense to account for and minimize slack flow in the case of the crossing on I-90 Alternative A at a steep, elevated bluff, through allowances within the operating regime, including the impact on hydraulics design and construction.

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